SURGERY

UNDER THE CHARGE OF

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The Influence of an Aseptic Serous Inflammation upon the Dissolution of Catgut.—Callam (*Deutsch. Zeitsch. f. Chir.*, 1912, cxviii, 265) says that an aseptic serous inflammation delays the dissolution of catgut in the mouse, an animal which absorbs the thread very quickly in the presence of severe suppuration. In the cases where the reaction on the inserted catgut is slight, as in the guinea-pig, no effect could be shown. The results of his experiments show that an artificial inflammation delays the absorption of catgut in the body of the white mouse. The uninfluenced process is nothing more than an aseptic suppuration. This process is moderated because the edema, caused by the artificial aseptic inflammation, scatters the leukocytes and permits only a slow development of their contained digestive strength. The tissues, therefore, which are subjected to the peptic influence, as well as the catgut, undergo less damage. Callam, in this way, coincides with the view of Bier, that the inflammation and its inherent healing power serve to moderate the damage done by the exciting cause of the inflammation. Since, as Joseph says in his text-book on hyperemia treatment, the slower and more mild the abnormal chemical process set up by the inflammation, attacks the surrounding tissue, the more time the tissue has to guard itself against the hurtful influence and to prevent the threatened field from damage and destruction. The flames which scorch the flesh of the unfortunate one in a few moments, allows the body no defence. So with the summer sun, which burns the body during weeks and months. The bacterial inflammations act in a similar manner. We have here a scientific explanation for the fact, discovered empirically, that catgut impregnated with antiseptics are destroyed more slowly than the catgut without antiseptic impregnation. When the inflammatory irritation does not cause edema of the tissues in which the catgut lies, the aseptic leukocytosis can develop more quickly and digest the catgut and tissues.

An Experimental Contribution Concerning the Formation of Bone from the Injection or Implantation of Periosteum Emulsion.—Jokoi (*Deutsch. Zeitsch. f. Chir.*, 1912, cxviii, 433), following the work of Nakahara and Dilger in the production of bone formation, carried out their experiments, chiefly on rabbits, rarely on dogs. They removed periosteum from the tibia and with sharp instruments divided it into small pieces. These were implanted subcutaneously or in the muscles. After varying periods they were cut out of the tissues and examined. From autoplastic implantation or injection of periosteum emulsion, Jokoi could, in 6 out of 7 experiments, produce a more or less marked bone formation. The active bone formation depends, above all, upon the mechanical relations of the implanted or injected pieces of periosteum to the surrounding tissues. In the unsuccessful experiments these were always shrivelled up or rolled together. In one of the experiments he established that the new-formed piece of bone had not undergone any absorption, but had shown rather a tendency to wider extension. From homoioplastic implantation or injection of periosteum emulsion also, bone formation can be produced, although not so frequently or so markedly as from the autoplastic. From heteroplastic implantation or injection of periosteum emulsion, no bone formation could be produced. The associated injection of fresh blood of the same animal appeared to have no favorable influence upon the osteoblastic activity of the transplanted pieces of periosteum. In all the experiments the associated particles of bone underwent lacunar absorption.

Small Plastic Operations on the Fingers and Hands.—KLAPP (*Deutsch. Zeitsch. f. Chir.*, 1912, cxviii, 479) reports several ingenious operations to make the hand more useful after injuries. When a finger has been cut off and the cut surface is even, it has usually been necessary to remove a piece of the phalanx in order that the end of the bone could be covered by the skin and underlying soft tissues. This sacrifices some of the length of the finger and increases the loss of function seriously, particularly in certain occupations, as in physicians and piano players. In one case in which the end of a finger had been cut off obliquely at the level of the middle of the finger-nail, a palmar flap having a lateral attachment was made and carried over the end of the bone, its free end being sutured in place on the opposite side of the finger. When the cut is transverse, by a transverse incision on the palmar side a short distance from the cut margin of skin, a flap can be made which is attached on both sides. This can be drawn by sutures as a bridge of tissue over the end of the bone. In a case in which the thumb was entirely removed, even with the side of the hand, Klapp separated the metacarpal bone of the thumb from the rest of the hand by dividing the soft tissues between. Two skin flaps were formed, one from the palmar and the other from the dorsal side. The interossei muscles were then divided, and one skin flap was used to cover the raw surface on the thumb side, while the other flap was made to cover the raw surface on the hand side. In this way the patient was given a short but very useful stump for a thumb. An illustration shows the repaired had grasping the handle of a mallet, the improvised stump of the thumb seeming to add much to the firmness of the grasp.

The Clinical Utilization of the Coagulation Time of the Blood in Jaundice.—KUNIKA (*Deutsch. Zeitsch. f. Chir.*, 1912, cxviii, 574) says that the taking of the coagulation time of the blood is rarely used in practical medicine because the methods thus far employed are not